

Recycling & Garbage Enclosure Guidelines

This document is intended to serve as a resource in determining the minimum space that should be included for shared garbage and recycling collection areas in plans for commercial and multifamily developments. They should be used in conjunction with the relevant sections of the Beaverton Development Code and the Beaverton Code referenced below.

The City of Beaverton is committed to helping build a more sustainable community, one that minimizes its use of natural resources, protects the environment, and creates a healthy, positive and safe setting for all of its community members. By providing garbage and recycling service that meets the needs of the user (customer/tenant) and service provider while also minimizing service frequency, and therefore greenhouse gas emissions, we are able to contribute to this vision.

Regulations

Beaverton Code <u>4.08.530</u> requires all businesses to recycle and as of 2021, qualified food generating businesses will be required to have weekly food scraps collection. Property owners and managers must provide services that enable tenants to be in compliance with Beaverton code.

City of Beaverton <u>Solid Waste & Recycling Administrative Rules</u> section E.3.a et seq. requires that multifamily and commercial property owners subscribe to weekly garbage and recycling service. Recycling and food scraps containers must be in both quantity and location reasonably similar to garbage and must be convenient for tenants to use.

All garbage and recycling facilities are required to be screened from public view by the <u>Beaverton</u> <u>Development Code</u> (Section 60.05.20.2) and will require land use approval to modify or construct. Please contact the Planning Division at 503-526-2420 for more information on screening requirements.

Cost efficiency and environmental sustainability

The least expensive garbage collection service for the rate payer (owner or tenant) is one that minimizes the number of service stops per week. Service of a larger container collected less frequently provides the customer with the opportunity to save a considerable amount of money compared to service with a smaller container serviced more frequently. Enclosures, and the truck access to them, should be designed to enable the most cost-effective and efficient service possible.

Designing for the most cost-effective option possible also reduces local truck traffic, saving money on road maintenance and repair and reducing the city's green-house gas emissions and environmental impact.

What to avoid

Inadequate size

If the enclosure is too small, receptacles may get placed outside of the enclosure which conflicts with Beaverton Development Code. Small enclosures can make it difficult to impossible for the user and service provider to access the receptacles. A larger enclosure allows for flexible service levels and is more easily adapted to the changing needs of businesses, e.g. a restaurant may require room for a food scrap collection receptacle and oil collection in addition to garbage and recycling, whereas an office building will generally not require these additional services.

If a roof is added to the enclosure, a minimum of 12 feet vertical clearance is necessary to allow lids to be opened and closed.

Inadequate gates

Gates should be large enough for the service truck to directly access the receptacles without the driver needing to manually move them.

Gates must lock in the open and closed position and not have a center post. Gates should lock in the open position at a minimum of a 120 degree angle.

Location

Trucks should be able to safely re-enter traffic without the need to back out onto public roadways. An enclosure at the end of an alley or in a place without adequate room for service vehicles to maneuver creates a dangerous situation for collection staff, as well as for vehicles and pedestrians.

The largest and most common truck used is about 37 feet in length. Driveways and lots should be designed to accommodate trucks with a turn radius of 60 feet, overhead clearance of 14 feet and weight of 55,000 lbs.

Enclosure designs

Plans submitted to the City should detail the location(s) and size of the enclosure(s). The plan should also show container footprints. Applicants are encouraged to contact Beaverton's Solid Waste & Recycling program with any questions, 503-526-2460 or email RecyclingMail@BeavertonOregon.gov.

Table A: Service level recommendations

All recommendations below assume once a week service as the preferred level of service; it is the most cost-effective, reduces green-house gas emissions and traffic. Food may be an exception and in some situations collected more than once a week. Please note, these are starting points, exact service levels will vary based on several factors (layout, type of business, number of employees etc.).

Land Use	Garbage	Mixed recycling	Glass recycling	Food waste
Multi-family residential	0.20 cubic yards per living unit	0.10 cubic yards per living unit	1 gallon per living unit	
Grocery	Compactor	Compactor for cardboard plus 6 cubic yards	64 gallons	16 cubic yards
Hotel w/restaurant	18 cubic yards	12 cubic yards	64 gallons	3 cubic yards
Hotel without restaurant	12 cubic yards	6 cubic yards	35 gallons	
Office	3 yards per 20,000 sf	3 yards per 20,000 sf	35 gallons per 20,000 sf	
Restaurant	3 cubic yards per 1500 sf	6 cubic yards per 1500 sf	35 gallons per 1500 sf	3 cubic yards per 1500 sf
Retail	3 yards per 8,000 sf	3 yards per 8,000 sf	35 gallon per 8,000 sf	

Table B: Receptacles sizes

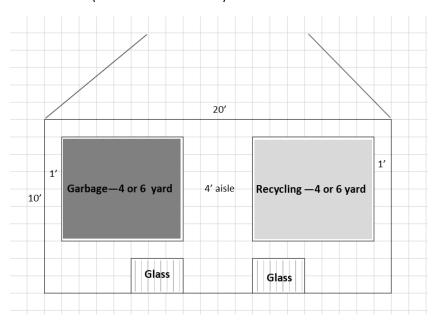
Containers (excludes carts) should have a minimum of one foot clearance on all sides.

Volume	Foot Print	Height
35-gallon cart (.20 cubic yard)	21" W x 24" D	39 inches
65-gallon cart (.34 cubic yard)	27" W x 29" D	41 inches
95-gallon cart (.52 cubic yard)	30" W x 34.0" D	46 inches
1 cubic yard	84" W x 24" D	37.5 inches (with casters)
1.5 cubic yards	84" W x 36" D	43.5 inches (with casters)
2 cubic yards	84" W x 36" D	49.5 inches (with casters)
3 cubic yards	84" W x 45" D	55.5 inches (with casters)
4 cubic yards	84" W x 54" D	61.5 inches (with casters)
6 cubic yards	84" W x 68" D	60 inches (no casters)

Examples of receptacle layouts

- Layout dimensions are approximate.
- Receptacle layouts show interior dimensions, no curb, footings or other obstructions.
- Provide a minimum of one foot interior clearance between receptacles (excluding carts) and other obstructions (walls, curbs, equipment, trees).
- Provide a minimum of twelve foot vertical clearance to open lids (from ground to top of lid).
- Provide a gate wide enough to easily remove receptacles for collection (one foot clearance).
 No center post.

A. 10 x 20 (residential – 200 sf)



B. 18 x 24 (commercial w/food scraps - 432 sf)

